

Appl. No. 10/686,024
Amdt. dated June 29, 2005
Reply to Office Action of February 2, 2005

PATENT

Amendments to the Drawings:

The attached four sheets of drawings include changes to Figs. 1-4. This sheets, which include Figs. 1-4 replaces the original three sheets including Figs. 1-4.

Present Fig. 2 becomes new Fig. 1; present Fig. 4 becomes new Fig. 2; Figs. 3 and 4 are added. Figs. 5 and 6 are unchanged.

(4 replacement sheets: Figs. 1-4) marked new drawings.

Attachment: Replacement Sheets

REMARKS/ARGUMENTS

Claims 1-4 were examined. Claim 1 has been amended. Re-examination and reconsideration of the claims, as amended, are respectfully requested.

The objections to the drawings have been overcome by deleting Figs. 1 and 3 as filed and renumbering Figs. 2 and 4 as filed as new Figs. 1 and 2. New Figs. 3 and 4 are being added. These figures are taken from parent patent U.S. 6,095,039, which had been fully incorporated herein by reference. Thus, no new matter has been added. Four replacements sheets including new Figs. 1-4 are attached. These Figs. have been labeled "Replacement Sheet" in the page header.

The objections to the specification have been overcome as follows.

The appropriate patent number has been added in paragraph 1 of the application.

The descriptions of Figs. 1-4, as present in the specification, now conform to the new Figs. 1-4 which have been substituted in this case. It is further believed that all the incorrect figure numbering in the specification becomes correct with the newly substituted figures.

Applicants apologize for the confusion caused by submitting the wrong drawing set initially.

The rejection of claims 1-3 as being anticipated by the Yamaguchi '690 patent has been overcome by amending independent claim 1 to more clearly distinguish the teachings of Yamaguchi.

Yamaguchi teaches that:

"Each of the elastic rolls and the hard rolls may be provided with its own drive means for rotation so that any rotation lag which may take place owing to slipping in the nips can be compensated for." (Col. 3, lines 46-49)

Furthermore, Yamaguchi teaches that:

The elastic roll and the hard roll are controlled by the controllers and by sending a signal indicating the speed of the hard roll and a signal from the pulse generator of the DC motor for the hard roll and comparing signals indicating the speeds of the pulse generators of the DC motors and for the elastic rolls and the

hard rolls, so as to ensure in harmony with the hard roll." (Col. 3, line 65-Col. 4, line 5)

Thus, it can be seen that Yamaguchi '690 describes a calendar in which the elastic rolls and the hard rolls are in "harmony" at all times and that the circumferential speed of each roll defining a nip is the same. All rolls in Yamaguchi are driven with the same circumferential speed.

The present invention, as now claimed, divides operation of the calendar into two phases. In a startup phase, the rotational speed is controlled and the set points are selected so that the rolls which define a nip have the same circumferential speed, as described in paragraph [0023] of the specification. In a second operating phase, the circumferential speed is somewhat limited since the resilient rolls deform in the region of the nip. That is, there is no longer a strict "harmony" between the rotational speed and the circumferential speed, as required by Yamaguchi '690. As expansion occurs when the roll is heated (as described in paragraph [0024] of the specification), power control is carried out during the operating phase.

Yamaguchi teaches no differentiation between a start-up phase and an operating phase. As such a distinction is clearly required by claim 1, Yamaguchi neither anticipates nor renders obvious the invention claimed herein.

The Examiner relies on U.S. Patent No. 4,380,954 to Dele in rejection dependent claim 4. Without conceding the correctness of this rejection, Applicants note that Dele in no way teaches the two-phase control now set forth in claim 1. Thus, dependent claim 4 is believed to be allowable for all reasons described with respect to independent claim 1.

As a final matter, Applicants are submitting Terminal Disclaimer over U.S. Patent No. 6,095,039 in order to overcome the obviousness type double patenting rejection.

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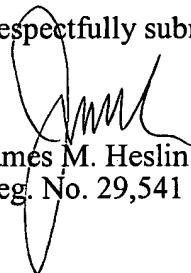
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CONCLUSION

In view of the above amendments and remarks, Applicants believe that all pending are in condition for allowance and request that the application be passed to issue at an early date.

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at (650) 326-2400.

Respectfully submitted,



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Attachments: *Terminal Disclaimer US 6,095,039*
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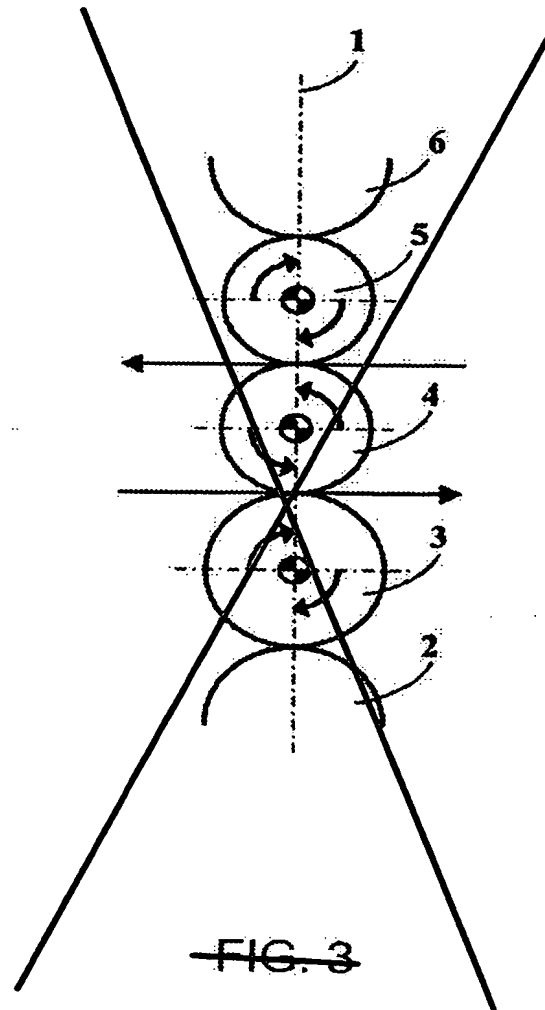
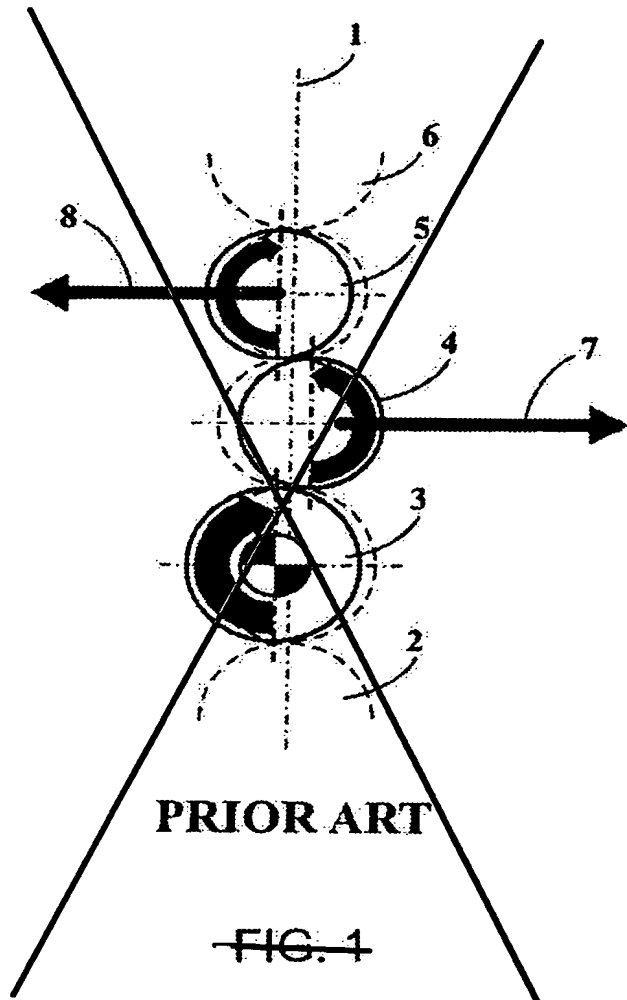
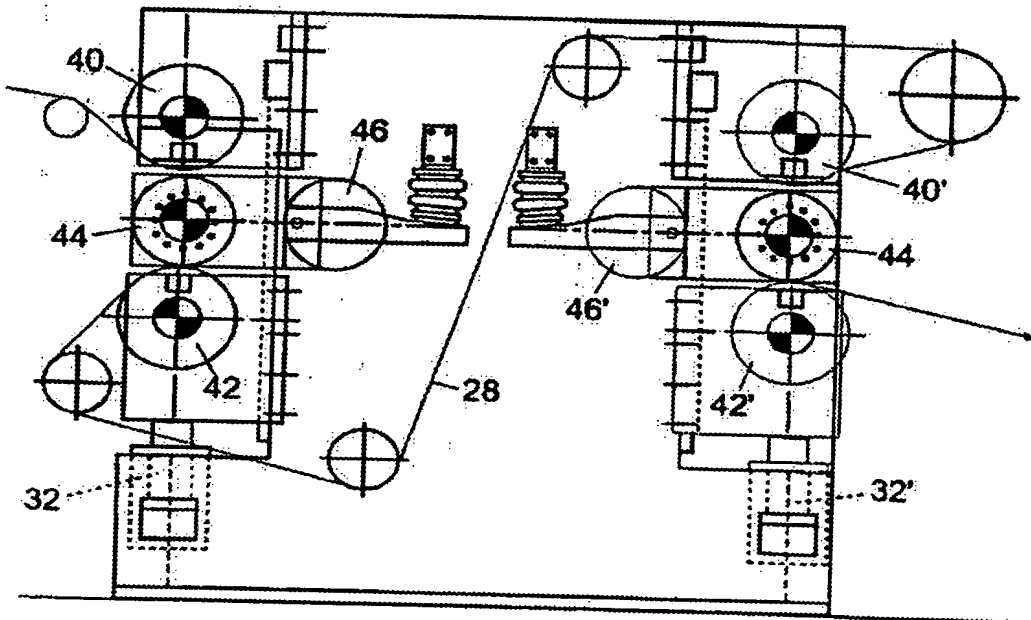


FIG. 1



~~FIG. 4~~

FIG. 2

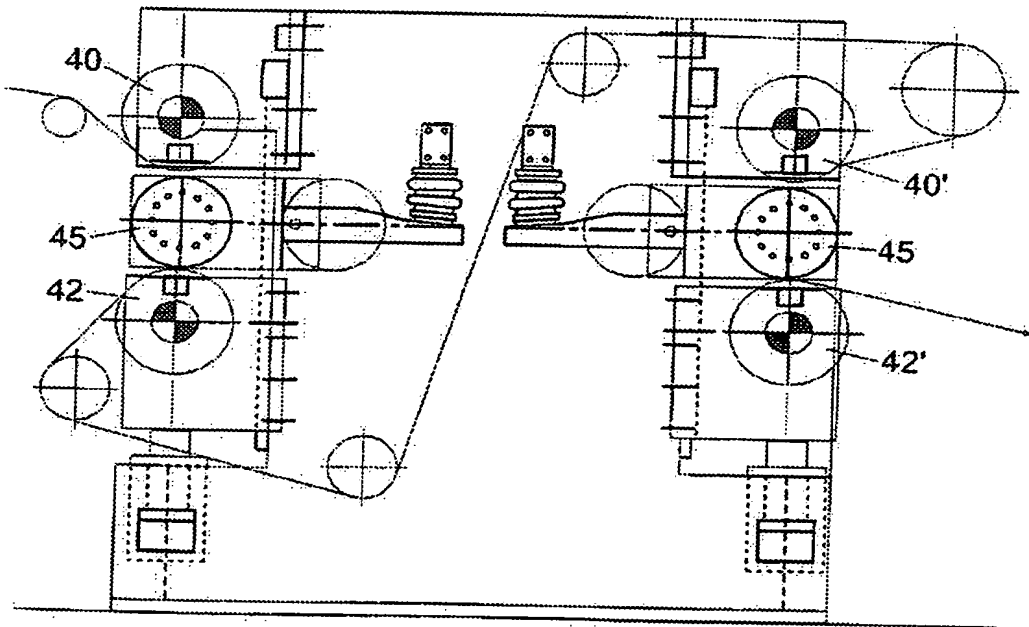


FIG. 3

NEW

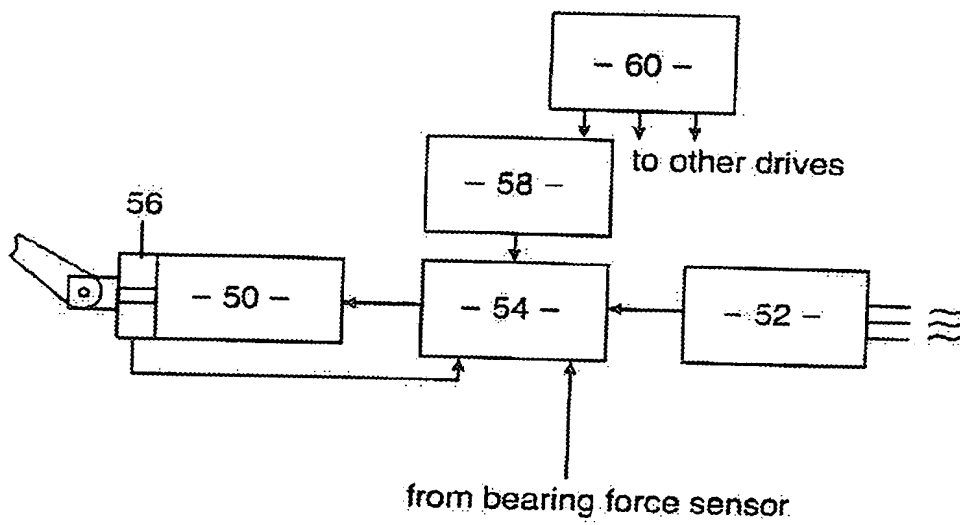


FIG. 4

NEW

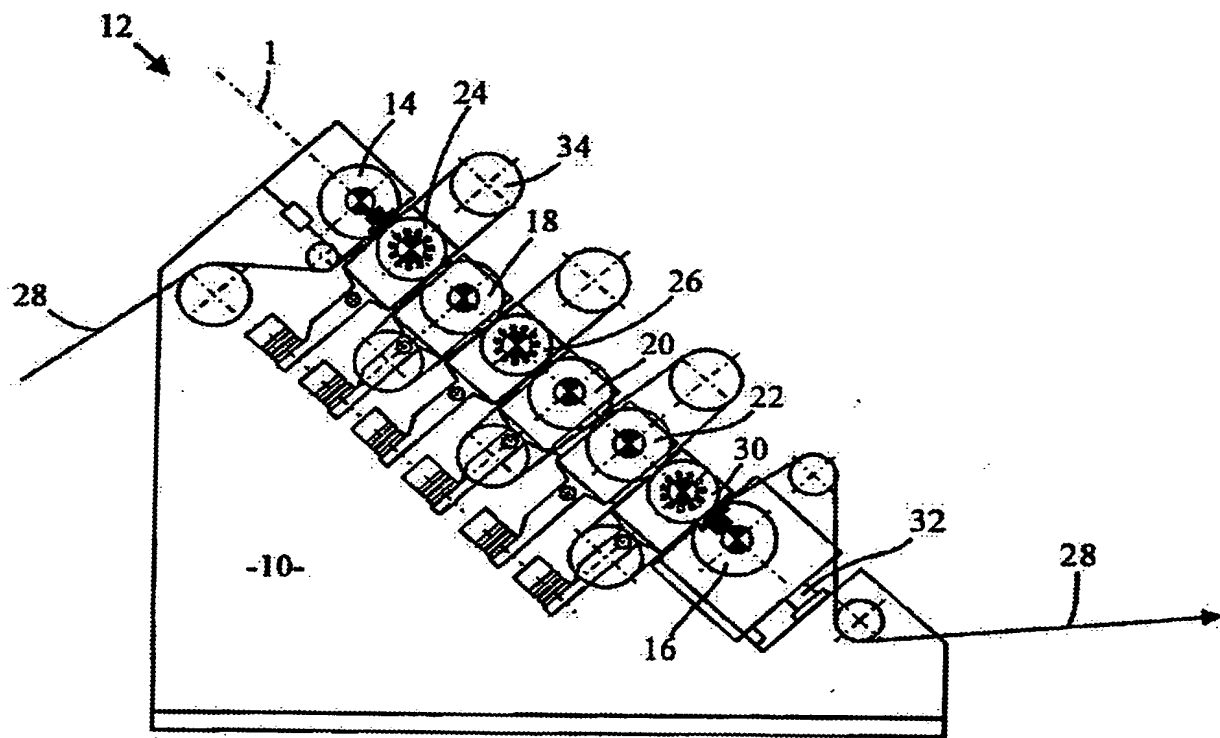


FIG. 5

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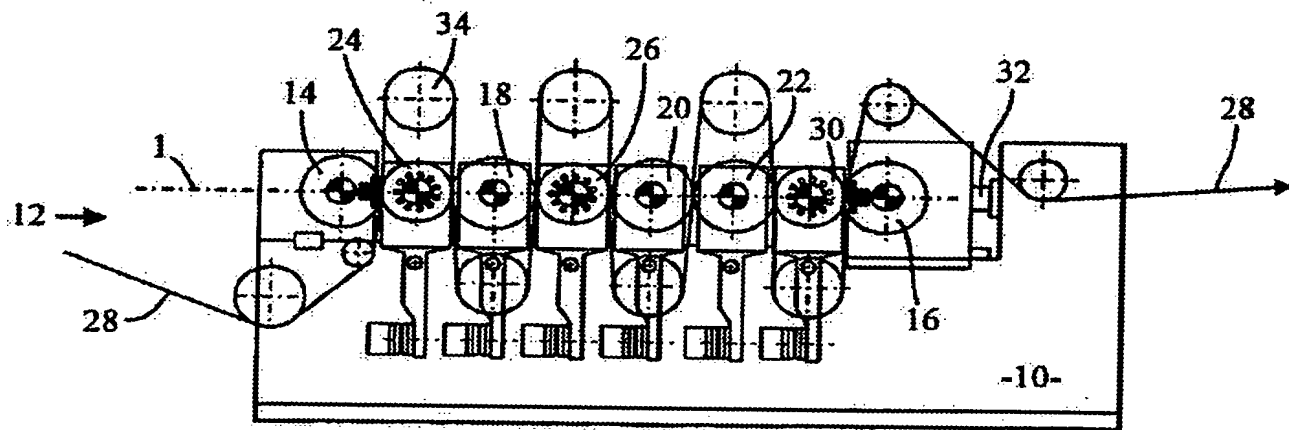


FIG. 6

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